



DIVISION OF
CORPORATION FINANCE
Mail Stop 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

April 28, 2009

Dr. Louis F. Centofanti
Chairman, President, and Chief Executive Officer
Perma-Fix Environmental Services, Inc.
8302 Dunwoody Place, #250
Atlanta, GA 30350

**Re: Perma-Fix Environmental Services, Inc.
Registration Statement on Form S-3
Filed April 7, 2009
File No. 333-158472**

Dear Dr. Centofanti:

We have limited our review of your filing to those issues that we have addressed in our comments. Where indicated, we think that you should revise your document in response to these comments. If you disagree, we will consider your explanation why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us information so that we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions that you may have about comments or any other aspect of our review. You may call us at the telephone numbers listed at the end of this letter.

General

1. We note disclosure on page 10 that Perma-Fix adopted a preferred share rights plan in May 2008. Perma-Fix is required to register the offer and sale of rights issued under an existing shareholder rights plan when it files a new registration statement under the Securities Act for the common stock to which the rights

- relate. See Question 116.16 in the Securities Act Forms section of the Division of Corporation Finance’s “Compliance and Disclosure Interpretations” that are available on the Commission’s website at <http://www.sec.gov>. Please revise.
2. Provide have counsel provide an opinion on the preferred share rights that are required to be covered by the registration statement. See Item 601(b)(5) of Regulation S-K.

Registration Statement Facing Page

3. Rule 416 of Regulation C under the Securities Act is inapplicable to this offering. Please revise footnote (1) to the calculation of registration fee table.

Risk Factors, page 2

4. We note the statements “The risks and uncertainties described below are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial also may impair our business operations.” Since Perma-Fix is required to disclose all risk factors that it believes are material at this time, please delete the statements.

Available Information, page 14

5. The address of the Commission’s Public Reference Room is 100 F Street, N.E., Washington, DC 20549 and not 450 Fifth Street, N.W., Washington, DC 20549. Please revise.
6. Please include your Commission file number for filings made under the Exchange Act.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us marked courtesy copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after review of your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosures in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information that investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosures, they are responsible for the adequacy and accuracy of the disclosures that they have made.

Notwithstanding our comments, when the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter at the time of the request, acknowledging that:

- Should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing.
- The action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing.
- The company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Also, please be advised that the Division of Enforcement has access to all information that you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statements. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Dr. Louis F. Centofanti
April 28, 2009
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You may direct questions on comments and disclosure issues to Edward M. Kelly,
Senior Counsel, at (202) 551-3728 or me, at (202) 551-3397.

Very truly yours,

Jay E. Ingram
Legal Branch Chief

cc: Irwin H. Steinhorn, Esq.
Conner & Winters, LLP
By facsimile at (405) 232-2695